

CLAIMS:

1. A wafer processing apparatus including a mini-environment portion having a chamber therein that is pressurized to a pressure higher than that of the exterior thereof and used for transferring a wafer between a clean box having a lid and housing the wafer and the chamber, said apparatus comprising:

a first opening portion which is formed on a part of a wall comprising the chamber to be in communication with the chamber, facing to an opening of the clean box so as to allow loading and unloading the wafer between the clean box and the mini-environment portion; and

a door that closes, when the transfer of the wafer is not performed, the first opening portion and opens, when the transfer of the wafer is performed,

wherein a gas flow path from the chamber to the exterior of the mini-environment portion is formed such that a flow rate of gas flowing from the chamber to the exterior of the mini-environment portion in case that the wafer transferring operation is not performed becomes substantially equal to a flow rate of gas flowing out from a space formed from the chamber and the clean box in case that the wafer transferring operation is performed.

2. A wafer processing apparatus according to claim 1, wherein a gas flow path of the gas flowing out from the space formed from the chamber and the clean box in case that the wafer transferring operation is performed includes a space formed around the opening of the clean box, and

the gas does not flow into the inner space of the clean box.

3. A wafer processing apparatus according to claim 1, wherein a gas flow path of the gas flowing out from the chamber to the exterior of the mini-environment portion in case that

the wafer transferring operation is not performed includes an aperture formed when the door closes the first opening portion.

4. A wafer processing apparatus according to claim 1, wherein a flow rate of the gas flowing the gas flow path is set so as to maintain the pressure in the chamber higher than that of the mini-environment portion, not to direct a gas flow flowing out from the space formed from the chamber and the clean box in case that the wafer transferring operation is performed, into the inner space of the clean box, and not to carry dust by the gas into inner space of the clean box.